

We Claim:

1. An isolated nucleic acid molecule comprising a PRU promoter that comprises in 3' to 5' direction (a) a sequence that shares at least 80% sequence identity with SEQ ID NO:7 or SEQ ID NO:10, and (b) a sequences that shares at least 80% sequence identity with SEQ ID NO:8 or SEQ ID NO:11, wherein said PRU promoter exhibits seed-associated promoter activity when operably linked to a heterologous protein-encoding sequence.
2. The isolated nucleic acid molecule of claim 1 wherein the PRU promoter additionally comprises (c) a sequence that shares at least 75% sequence identity with SEQ ID NO:9 or SEQ ID NO:12.
3. The isolated nucleic acid molecule of claim 1 wherein the PRU promoter comprises nucleotides 1055-1212 of SEQ ID NO:1.
4. The isolated nucleic acid molecule of claim 3 wherein the PRU promoter comprises nucleotides 854-1212 of SEQ ID NO:1.
5. The isolated nucleic acid molecule of claim 4 wherein the PRU promoter comprises SEQ ID NO:1.
6. The isolated nucleic acid molecule of claim 1 wherein the PRU promoter comprises nucleotides 1043-1198 of SEQ ID NO:6
7. The isolated nucleic acid molecule of claim 6 wherein the PRU promoter comprises nucleotides 827-1198 of SEQ ID NO:6.
8. The isolated nucleic acid molecule of claim 7 wherein the PRU promoter comprises SEQ ID NO:6.
9. A plant expression vector comprising a chimeric construct comprising the isolated nucleic acid molecule of claim 1.

10. The plant expression vector of claim 9, wherein the PRU promoter is operably linked to a heterologous protein encoding sequence.

11. The plant expression vector of claim 9 that comprises, in the 5' to 3' orientation, a first heterologous protein encoding sequence in the antisense direction, the PRU promoter, and a second heterologous encoding sequence in the sense direction, wherein the vector is double-stranded, and wherein the PRU promoter directs seed-associated expression of both the first and the second heterologous nucleic acid coding sequences.

12. A transgenic plant cell comprising a plant expression vector of claim 9 in its genome.

13. The plant cell of claim 12, which is from a plant belonging to the *Prunus* genus.

14. The plant cell of claim 13, which is from a plant selected from the group consisting of cherry, almond, peach, apricot, and plum.

15. The plant cell of claim 12, which is from *Arabidopsis*.

16. A method for producing a transgenic plant that exhibits seed-associated expression of a heterologous nucleic acid coding sequence, comprising:

- a) transforming progenitor cells of the plant with a plant expression vector of claim 10, and
- b) growing the transformed progenitor cells to produce a transgenic plant that exhibits seed-associated expression of the heterologous protein encoding sequence.

17. A plant obtained by the method of claim 16.

18. The plant of claim 17, which belongs to the *Prunus* genus.

19. The plant of claim 18, which is selected from the group consisting of cherry, almond, peach, apricot, and plum.

20. The plant of claim 17, which is *Arabidopsis*.
21. A plant part obtained from a plant according to claim 17.
22. The plant part of claim 21, which is a seed.
23. Oil obtained from a plant of claim 17.
24. An isolated nucleic acid molecule comprising a PRU promoter from peach, apricot, plum or cherry, wherein the PRU promoter has a promoter sequence that is naturally located upstream of a translational start codon of a gene encoding a 12S globulin seed storage protein, and wherein the PRU promoter directs seed-associated expression of a heterologous nucleic acid coding sequence to which it is operably linked.
25. An isolated nucleic acid molecule comprising a PRU promoter, wherein the promoter has a promoter sequence that is naturally located upstream of a translational start codon of a chPru1 or chPru2 gene in the cherry genome, wherein the chPru1 gene comprises the sequence presented as SEQ ID NO:2, and wherein the chPru2 gene comprises the sequence presented as SEQ ID NO:3.
26. A nucleic acid molecule of claim 2 that hybridizes under high stringency conditions to the nucleic acid molecule having the sequence of SEQ ID NO:1, or the complement thereof.